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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 09/865,336 05/25/2001 Zane Drussel 15.0062 0103 26813 7590 03/17/2003 MUETING, RAASCH & GEBHARDT, P.A. EXAMINER P.O. BOX 581415 NORRIS, JEREMY C MINNEAPOLIS, MN 55458 ART UNIT PAPER NUMBER 2827

DATE MAILED: 03/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action

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Application No. Applicant(s) 09/865,336 DRUSSEL ET AL. Examiner Art Unit Jeremy C. Norris 2827

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 25 November 2002 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]	
a) The period for reply expires 3 months from the mailing date of the final rejection.	
b) Light The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).	
Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extensio fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extensio fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).	
1. A Notice of Appeal was filed on Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.	
2. The proposed amendment(s) will not be entered because:	
(a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);	
(b) they raise the issue of new matter (see Note below);	
(c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or	
(d) They present additional claims without canceling a corresponding number of finally rejected claims.	
NOTE:	
3. Applicant's reply has overcome the following rejection(s):	
4. Newly proposed or amended claim(s) would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).	
5. ☑ The a) ☐ affidavit, b) ☐ exhibit, or c) ☑ request for reconsideration has been considered but does NOT place the application in condition for allowance because: <u>see attached sheet</u> .	
6. The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.	
7. For purposes of Appeal, the proposed amendment(s) a) will not be entered or b) will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.	
The status of the claim(s) is (or will be) as follows:	
Claim(s) allowed: 22-62.	
Claim(s) objected to: <u>75</u> .	
Claim(s) rejected: <u>69-74 and 76-78</u> .	
Claim(s) withdrawn from consideration: <u>63-68</u> .	
8. The proposed drawing correction filed on is a) approved or b) disapproved by the Examiner.	
9. Note the attached Information Disclosure Statement(s)(PTO-1449) Paper No(s)	
10. Other:	
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DETAILED ACTION

Response to Arguments

Applicant's arguments filed 25 November 2002 have been fully considered but they are not persuasive.

Applicants allege that the rejection of claims 69-74 and 76-78 in view US 5,448,451, granted to Takubo et al, was improper for several reasons. Each will now be responded to.

First Applicants argue, "that Takubo et al. does not teach each and every element of claims 69- 74 and 76-78. For example, claim 69 teaches a plurality of circuit forming regions including at least one pair of adjacent circuit forming regions. In contrast to claim 69, the embodiment of Takubo et al. relied upon by the Examiner (i.e., FIG. 7A) teaches a single chip 8 positioned in device hole 6. In other words, FIG. 7A of Takubo et al. only teaches a single alleged 'circuit forming region" and not at least one pair of adjacent circuit forming regions." However, Examiner believes that Applicants have taken the figure out of the context of the Takubo reference. Takubo clearly states that figure 7A (and likewise figure 7B) "are enlarged views of one of device regions of tape". Furthermore, the entire reference is directed to Tape Automated Bonding (TAB). One having ordinary skill in the art would understand that the portion shown in figure 7A would be just one of several side-by-side portions on a extend roll of tape, such as shown in figure 1. MPEP § 2125 states "The drawings must be evaluated for what they reasonably disclose and suggest to one of ordinary skill in the art. *In re Aslanian*, 590 F.2nd 911, 200 USPQ 500 (CCPA 1979)". Since an ordinarily skilled artisan would

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understand the that the context of TAB necessitates many side-by-side portions, Examiner submits that the Takubo does indeed disclose "a plurality of circuit forming regions including at least one pair of adjacent circuit forming regions". Therefore, the traversal of the rejection on this ground is deemed unsuccessful.

Secondly, Applicants argue, "Takubo et al. teaches a film carder tape having lead wire groups (e.g., lead wire group 3-2 of FIG. 7A) that extend from the chip onto the film. As can be seen in FIG. 7A, Takubo et al. teaches that the lead wire group 3-2 extends beyond the alleged circuit forming region 6 and over the lead holes 7-1 and 7-2. Therefore, Takubo et al. does not teach a packaged individual circuit (which includes conductive circuit connection elements) in each of the one or more circuit forming regions adjacent the at least one opening as is alleged by the Examiner." Applicants further bolster this argument by submitting, "As can bee seen in FIG. 3D (of the instant application), encapsulated or molded package portion 50 is formed in the substrate material adjacent (emphasis original) the at least one opening 24 as described in claim 69. In other words, the packaged individual circuit is formed entirely in the circuit forming region and does not extend beyond the circuit forming region into or across the opening. As such, singulating the substrate material would cause the packaged individual circuits to be completely and individually separated as is desired according to the present invention." However, Examiner disagrees with the assertion that the claims as presented exclude the ability for the packaged individual circuit to overlap the opening. Regarding this limitation, the claim as presented simply states "one or more circuits formed in one or more of the circuit forming regions of the substrate material

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resulting in a packaged individual circuit in each of the one or more circuit forming regions, wherein each packaged individual circuit is formed in the substrate material adjacent the at least one opening." There is nothing in this terminology that would suggest to the ordinarily skilled artisan that a small overlap is to be expressly excluded. On the contrary, one of ordinary skill in the art would look at figure 7A of Takubo and determine that the packaged individual circuit is indeed adjacent to the opening. Therefore, the traversal on this ground is deemed to be unsuccessful. Examiner suggests that if Applicants deem that such an exclusion of overlap is crucial to their invention that they include language in the claims that expressly states that.

Finally, Applicant submit, "Further, if the film carrier tape of Takubo et al. were singulated, then the circuits would not fall apart as the individual package is not adjacent the opening but instead extends across the opening. In other words, the film carrier tape would not be able to be singulated because the lead wire group 3-2, which extends over the lead holes 7-1 and 7-2, would remain attached to the film carrier tape on the other side of the opening." Examiner believes that this statement stems from a misunderstanding of the TAB process. An artisan of ordinary skill would understand that while there would indeed be a portion of the lead wire group remaining on the film carrier after singulation, this portion was not considered to be part of the final packaged device. That is to say, that the device is *designed* to have a portion discarded. This portion is, therefore, not parcel to the final individual packaged circuit, but rather a portion to be used only during processing and to be later discarded. Therefore, an ordinarily skilled artisan would understand that the device could indeed be singulated

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into an individual packaged circuit. Hence, the traversal on this ground is deemed unsuccessful.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy C. Norris whose telephone number is 703-306-5737. The examiner can normally be reached on Mon.-Th., 9AM - 6:30 PM and alt. Fri. 9AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Talbott can be reached on 703-305-9883. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-0725 for regular communications and 703-308-0725 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

JCSN March 13, 2003 DAVID L. TALBOTT

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